



BRANZ Appraised

Appraisal No. 1299 [2025]

EZYMIX INTERNAL WATERPROOFING MEMBRANE

Appraisal No. 1299 [2025]



BRANZ Appraisals

Technical Assessments of
products for building and
construction.



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Product

- 1.1 Ezymix Internal Waterproofing Membrane is a highly elastic, liquid, single component, solvent-free waterproofing membrane for use under tiles on walls and floors.

Scope

- 2.1 The Ezymix Internal Waterproofing Membrane has been appraised for use as a waterproofing membrane for internal wet areas of buildings within the following scope:
- on floor substrates of plywood, concrete, flooring grade particleboard, fibre cement compressed sheet and fibre cement sheet tile underlay; and,
 - on wall substrates of concrete, concrete masonry, wet area fibre cement sheet lining systems and wet area plasterboard lining systems; and,
 - when protected from physical damage by trafficable floor finishes; and,
 - where floors are designed and constructed such that deflections do not exceed $1/360^{\text{th}}$ of the span.
- 2.2 The use of the Ezymix Internal Waterproofing Membrane on concrete slabs where hydrostatic or vapour pressure is present from below is outside the scope of this Appraisal.
- 2.3 Movement and control joints in the substrate must be carried through the membrane and trafficable floor finish. The design and construction of the substrate and movement and control joints is specific to each building and is therefore the responsibility of the building designer and building contractor and will be outside the scope of the Appraisal.
- 2.4 The trafficable floor finishes are outside the scope of this Appraisal.
- 2.5 The membrane must be installed by trained installers, approved by Ezymix Limited.

Building Regulations

- 3.1 In the opinion of BRANZ, the Ezymix Internal Waterproofing Membrane, if designed, used, installed and maintained in accordance with the statements and conditions of this Appraisal, will meet the following provisions of the NZBC:

Clause B2 DURABILITY: Performance B2.3.1 (b) 15 years and B2.3.2. Ezymix Internal Waterproofing Membrane meets these requirements. See Paragraph 9.1.

Clause E3 INTERNAL MOISTURE: Performance E3.3.6. Internal wet area floors and walls incorporating the Ezymix Internal Waterproofing Membrane meet this requirement. See Paragraphs 11.1–11.7.

Clause F2 HAZARDOUS BUILDING MATERIALS: Performance F2.3.1. Ezymix Internal Waterproofing Membrane meets this requirement.

Technical Specification

4.1 Materials supplied by Ezymix Limited are as follows:

General

- **Ezymix Internal Waterproofing Membrane** - a highly elastic, one-part, ready-to-use liquid waterproofing membrane for internal use made from synthetic resins and in an aqueous dispersion. It is supplied as a light grey or dusky pink paste in 25 kg buckets.
- **EM 230 FG** - an acrylic-based dispersion primer for absorbent substrates. It is supplied as a blue liquid in 10 L buckets.
- **EM 231 SpG** - a ready-to-use primer for smooth or non-absorbent substrates. It is supplied as a turquoise liquid in 2.5 or 10 L bucket.

Accessories

- **Ezymix AD Sealing Tape** - a fleece-coated elastic butyl self-adhesive sealing tape for use in wet areas on horizontal and vertical joints under tiles.
- **Ezymix AD Internal Corner** - a fleece-coated self-adhesive preformed internal corner for use in wet areas under tiles.
- **Ezymix AD External Corner** - a pre-formed NBR rubber moulding for use in inside corners under trafficable layers.
- **Ezymix NA Sealing Tape** - a fleece-coated non-woven NBR rubber elastic sealing tape for use in wet areas on horizontal and vertical joints under tiles.
- **Ezymix NA Internal Corner** - a fleece-coated non-woven NBR rubber elastic preformed internal corner for use in wet areas under tiles.
- **Ezymix NA External Corner** - a fleece-coated pre-formed PEVB moulding for use in outside corners under trafficable layers.
- **Ezymix NA Floor Sleeve** - a fleece-coated non-woven NBR rubber floor sleeve with a centrally elastic zone used to waterproof floor drains.
- **Ezymix NA Wall Sleeve** - a fleece-coated non-woven NBR rubber wall sleeve with a central flexible zone used to waterproof pipe penetrations in walls.

Handling and Storage

5.1 All materials must be stored inside, away from direct sunlight, heat, and flame in a dry space at temperatures between 6°C and 32°C. Materials must not be removed from their containers until ready to use. The membrane products have a shelf life of 12 months from the date of manufacture in the original unopened packaging. Once opened, the products must be used within 3 months.

Technical Literature

6.1 This Appraisal must be read in conjunction with:

- EM 240 IWM TDS, V1, Issued 09/09/2025
- EM 230 FG Tile Primer TDS, V1, Issued 09/09/2025
- EM 231 SpG Tile Primer TDS, V1, Issued 09/09/2025
- Adhesive Sealing Tape TDS, V1, Issued 09/09/2025
- Non Adhesive Sealing Tape TDS, V1, Issued 09/09/2025
- Adhesive External Corner TDS, V1, Issued 09/09/2025
- Non Adhesive External Corner TDS, V1, Issued 09/09/2025
- Adhesive Internal Corner TDS, V1, Issued 09/09/2025
- Non Adhesive Internal Corner TDS, V1, Issued 09/09/2025
- Non Adhesive Floor Sleeve TDS, V1, Issued 09/09/2025
- Non Adhesive Wall Sleeve TDS, V1, Issued 09/09/2025

6.2 All aspects of design, use, installation and maintenance contained in the Technical Literature and within the scope of this Appraisal must be followed.

Design Information

General

- 7.1 The Ezymix Internal Waterproofing Membrane is for use in buildings where an impervious waterproof membrane is required to floors and walls to prevent damage to building elements and adjoining areas.
- 7.2 The membrane must be protected from physical damage by the application of trafficable floor finishes.
- 7.3 Movement and control joints may be required depending on the shape and size of the building or room, and the trafficable floor finish specified.
- 7.4 Timber framing must comply with NZS 3604, or where specific engineering design is used, the framing shall be of at least equivalent stiffness to the framing provisions of NZS 3604, or comply with the serviceability criteria of AS/NZS 1170. In all cases, framing must be provided so that the maximum span of the substrate as specified by the substrate manufacturer is met. Timber framing supporting the substrates must be constructed such that deflections do not exceed $1/360^{\text{th}}$ of the span. Where NZS 3604 is used, the allowable joist spans given in Table 7.1 shall be reduced by 20%.

Substrates

Plywood

- 8.1 Plywood must be a minimum of 17 mm thick complying with AS/NZS 2269, CD Grade Structural with sanded C face upwards and treated to H3 [CCA treated]. LOSP treated plywood must not be used.
- 8.2 The plywood must be laid with the face grain at right angles to the floor joists. The plywood must be supported with dwangs or framing with a maximum span of 400 mm in each direction, fixed with 10 g x 50 mm stainless steel countersunk head screws at 150 mm centres on the edges and 200 mm through the body of the sheets.

Fibre Cement Compressed Sheet/Fibre Cement Sheet Tile Underlay

- 8.3 Fibre cement compressed sheet and tile underlay must be manufactured to comply with the requirements of AS/NZS 2908.2 and must be specified by the manufacturer as being suitable for use as a wet area substrate. Installation must be carried out in accordance with the manufacturer's instructions.

Particleboard

- 8.4 Particleboard must be specified for the end use in accordance with NZS 3602.

Strandfloor H3.1®

- 8.5 The installation of Strandfloor H3.1® in wet areas must be undertaken in conjunction with the Technical Literature; NZS 3604, Paragraph 4.3.4; and NZS 3602, Table 1. Strandfloor H3.1® must be installed with centres no greater than 450 mm. Refer to the Technical Literature and BRANZ Appraisal No. 677 for more information.

Concrete and Concrete Masonry

- 8.6 Concrete and concrete masonry substrates must be to a specific engineering design meeting the requirements of the NZBC, such as concrete construction to NZS 3101 and NZS 3604 concrete slab-on-ground floors and concrete masonry to NZS 4229 and NZS 4230.

Wet Area Wall Linings

- 8.7 Plasterboard wall linings must be manufactured to comply with AS/NZS 2588 and be suitable for use in internal wet areas.
- 8.8 Fibre cement sheet must be suitable for use in wet areas and comply with AS/NZS 2908.2.
- 8.9 Installation of plasterboard or fibre cement wall linings must be carried out in accordance with the instructions of the manufacturer.

Durability

Serviceable Life

- 9.1 The Ezymix Internal Waterproofing Membrane, when subjected to normal conditions of environment and use, is expected to have a serviceable life of at least 15 years and be compatible with trafficable floor finishes with a design serviceable life of 15-25 years.

Maintenance

- 10.1 No maintenance of the membrane will be required provided significant substrate movement does not occur and the trafficable floor finish remains intact. Regular checks must be made of floor finishes to ensure they are sound and will not allow moisture to penetrate. Any cracks or damage must be repaired immediately.
- 10.2 In the event of damage to the membrane, the floor finish must be removed and the membrane repaired by removing the damaged portion and applying a patch as for new work.
- 10.3 Drainage outlets must be maintained to operate effectively, and trafficable floor finishes must be kept clean.

Internal Moisture

- 11.1 The Ezymix Internal Waterproofing Membrane is impervious to water and when appropriately designed and installed will avoid the likelihood of water penetrating behind linings or entering concealed spaces.
- 11.2 The Ezymix Internal Waterproofing Membrane is suitable for use to contain accidental overflow to meet NZBC Clause E3.3.2. A means of code compliance for overflow is given in NZBC Acceptable Solution E3/AS1.
- 11.3 Surfaces must be finished with trafficable floor finishes. A means of code compliance to NZBC Clause E3.3.3 is given in NZBC Acceptable Solution E3/AS1.
- 11.4 Falls in showers and shower areas must be a minimum of 1 in 50. In unenclosed showers, falls must extend a minimum of 1,500 mm out from the shower rose. Floor wastes must be provided, and the floor must fall to the outlet.
- 11.5 The waterproofing membrane must completely cover shower bases, and for unenclosed showers it must extend a minimum of 1,500 mm out from the shower rose. Further design guidance on waterproofing wet areas, including waterproofing walls and junctions can be obtained from AS 3740 and flooring and wallboard manufacturers.
- 11.6 Where water-resistant wall finishes such as prefinished sheet materials are used, they must flash over the membrane a minimum of 30 mm.
- 11.7 BRANZ recommends the entire floor be covered by a waterproof membrane for bath, shower and spa rooms where timber, plywood or particleboard floors are used. This is also a requirement of particleboard manufacturers.

Installation Information

Installation Skill Level Requirement

- 12.1 Installation of the membrane must be completed by Ezymix Limited approved and trained applicators.
- 12.2 Installation of substrates must be completed by tradespeople with an understanding of internal wet area construction, in accordance with instructions given within the Ezymix Internal Waterproofing Membrane Technical Literature and this Appraisal.

Preparation of Substrates

- 13.1 Substrates must be dry, clean and stable before installation commences. Surfaces must be even and free from nibs, sharp edges, dust, dirt or other materials such as oil, grease or concrete formwork release agents.
- 13.2 Concrete substrates can be checked for dryness by using a hygrometer as set out in BRANZ Bulletin No. 585. The relative humidity of the concrete must be 75% or less before membrane application.
- 13.3 All voids, cracks, holes, joints and excessively rough areas must be filled to achieve an even and uniform surface. Junctions of substrate abutments, such as at wall/floor or wall/wall junctions and control joints must use installed as set out in the Technical Literature.
- 13.4 Substrates must be primed with a primer as specified by Ezymix Limited and allowed to dry fully before the membrane is installed.

Membrane Installation

- 14.1 Installation must not be undertaken where the substrate surface temperature is below 6°C or above 35°C.
- 14.2 The Ezymix Internal Waterproofing Membrane must be thoroughly stirred before application.
- 14.3 The membrane must be applied in a minimum of two coats at the coverage rates set out in the Technical Literature. Subsequent coats must be applied in the opposite direction to the previous coat.
- 14.4 Application can be made by roller [medium/long nap], brush [long bristle], or on floors with a rubber grouting blade.
- 14.5 The installation and use of reinforcing must comply with the instructions of the Technical Literature.
- 14.6 Clean up may be undertaken with water.

Tiling

- 15.1 The membrane must be cured fully before tiling. The cured membrane must be protected at all times to prevent mechanical damage, so may require temporary covers until the finishing is completed.
- 15.2 Tiling must be undertaken in accordance with AS 3958.1. The compatibility of the tile adhesive must be confirmed with Ezymix Limited.

Inspections

- 16.1 Critical areas of inspection are:
 - Construction of substrates, including crack control and installation of bond breakers and movement control joints.
 - Moisture content of the substrate prior to the application of the membrane.
 - Acceptance of the substrate by the membrane installer prior to application of the membrane.
 - Installation of the membranes to the manufacturer's instructions, particularly installation to the correct thickness and use of reinforcement.
 - Membranes curing and integrity prior to the installation of trafficable floor finishes including protection from mechanical damage during curing and prior to floor finish installation.

Health and Safety

- 17.1 Safe use and handling procedures for the membrane are provided in the Technical Literature. The materials must be used in conjunction with the relevant Material Safety Data Sheet.

Basis of Appraisal

The following is a summary of the technical investigations carried out:

Tests

- 18.1 The following testing of Ezymix Internal Waterproofing Membrane has been undertaken by BRANZ:
- Testing to AS/NZS4858, Appendix A including effect of bleach, detergent, and water on tensile and elongation, cyclic movement resistance, and water absorption.
 - Testing to assess durability, water absorption, thermal stability, shear, adhesion, static water head resistance, water vapour transmission and suitability over plywood, plaster board, concrete and polyurethane. The test results were reviewed by BRANZ experts and found to be satisfactory

Other Investigations

- 19.1 An assessment of the durability of the Ezymix Internal Waterproofing Membrane was made by BRANZ technical experts.
- 19.2 Site inspections have been carried out by BRANZ to assess the practicability of installation and to examine completed installations.
- 19.3 The Technical Literature has been examined by BRANZ and found to be satisfactory.

Quality

- 20.1 The manufacture of the Ezymix Internal Waterproofing Membrane has been examined by BRANZ and found to be satisfactory.
- 20.2 The quality management system of the membrane's manufacturer has been assessed and found to be satisfactory.
- 20.3 The quality of supply to the market is the responsibility of Ezymix Limited.
- 20.4 Designers are responsible for the building design, and building contractors are responsible for the quality of installation of the framing and substrates systems in accordance with the instructions of the substrate manufacturer, Ezymix Limited, and this Appraisal.
- 20.5 The quality of installation on-site is the responsibility of the Ezymix Limited approved and trained applicator.

Sources of Information

- AS 3740:2021 Waterproofing of domestic wet areas.
- AS 3958.1:2007 Ceramic tiles - Guide to the installation of ceramic tiles.
- AS/NZS 1170:2002 Structural design actions.
- AS/NZS 2269:2012 Plywood - Structural.
- BRANZ Appraisal No. 677 Strandfloor® H3.1 Flooring.
- BRANZ Bulletin 585 - Measuring moisture in timber and concrete.
- NZS 3101:2006 Concrete structures.
- NZS 3109:1997 Concrete construction.
- NZS 3602:2003 Timber and wood-based products for use in buildings.
- NZS 3603:1994 Timber structures standard.
- NZS 3604:2011 Timber-framed buildings.
- Ministry of Business, Innovation and Employment Record of amendments - Acceptable Solutions, Verification Methods and handbooks.
- The Building Regulations 1992.



In the opinion of BRANZ, the **Ezymix Internal Waterproofing Membrane** is fit for purpose and will comply with the Building Code to the extent specified in this Appraisal provided it is used, designed, installed and maintained as set out in this Appraisal.

The Appraisal is issued only to **Ezymix Limited**, and is valid until further notice, subject to the Conditions of Appraisal.

Conditions of Appraisal

1. This Appraisal:
 - a) relates only to the product as described herein;
 - b) must be read, considered and used in full together with the Technical Literature;
 - c) does not address any Legislation, Regulations, Codes or Standards, not specifically named herein;
 - d) is copyright of BRANZ.
2. **Ezymix Limited:**
 - a) continues to have the product reviewed by BRANZ;
 - b) shall notify BRANZ of any changes in product specification or quality assurance measures prior to the product being marketed;
 - c) abides by the BRANZ Appraisals Services Terms and Conditions;
 - d) warrants that the product and the manufacturing process for the product are maintained at or above the standards, levels and quality assessed and found satisfactory by BRANZ pursuant to BRANZ's Appraisal of the product.
3. BRANZ makes no representation or warranty as to:
 - a) the nature of individual examples of, batches of, or individual installations of the product, including methods and quality of work;
 - b) the presence or absence of any patent or similar rights subsisting in the product or any other product;
 - c) any guarantee or warranty offered by **Ezymix Limited**.
4. Any reference in this Appraisal to any other publication shall be read as a reference to the version of the publication specified in this Appraisal.
5. BRANZ provides no certification, guarantee, indemnity or warranty, to **Ezymix Limited** or any third party.

For BRANZ



Claire Falck

Chief Executive

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24 November 2025